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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,648	05/19/2004	David Silvers	71568-0007	8966
20915 7590 03/21/2007 MCGARRY BAIR PC 171 MONROE AVENUE, N.W. SUITE 600 GRAND RAPIDS, MI 49503			EXAMINER EDWARDS JR, TIMOTHY	
			ART UNIT	PAPER NUMBER
			2612	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/21/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/709,648

Applicant(s)

SILVERS, DAVID

Examiner

Timothy Edwards, Jr.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on amendment filed November 14, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1,5,11,19 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4,6-10,12-18,20-28 and 30-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 2-4,6-10,12-18,20-28,30-41 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-4,6-10,12-18,20-28,30,32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandhyan et al '023.

Considering (amended) claim 10, Mandhyan discloses a sensor system for collecting sensed data comprising a) a central store that is programmed to encode data packets to and from sensors with a predefined path is not specifically recited by Mandhyan.

However, Mandhyan disclose a control node having means to maintain a map of sensor location (see paragraph 0026). Mandhyan discloses maintaining a route to each sensor (see paragraph 0053). Mandhyan also, discloses a route establishment message in which the control node indicates the number of hops to the control node (see paragraph 0056). Mandhyan also, discloses sending a message to a destination node and sending the message through a specific node, the control node expects to receive an

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acknowledgement message from the destination node through the specific first node (see paragraph 0065). The capabilities of the control node of Mandhyan suggest the means to direct the sensor to the best path to send data to the control node. Therefore, it would have been obvious to one of ordinary skill in the art to modify the message to the sensor to include a predefined path because the route establishment message of Mandhyan system suggest giving each sensor the best route to the control node; b) a plurality of sensors programmed to record data, a transceiver to transmit and receive data to and from a control node and other nodes (see paragraphs 0021-0024 and 0032-0034, fig 1, items 120 and 122, also fig 7); c) a data transmission processor adapted to receive wireless data and convert the wireless data to a communication signal for a central data store (see paragraphs 0028, 0035-0037 and fig 1, item 150); d) data is transmitted to the central data store via a predefined hopping path (see paragraphs 0030 and 0040).

Considering (amended) claim 2, Mandhyan discloses the limitation of this claim (see paragraphs 0030 and 0037, fig 1, items 110 and Internet Gateway).

Considering (amended) claim 3, Mandhyan discloses the limitation of this claim (see paragraph 0038).

Considering (amended) claim 4, Mandhyan does not specifically recite making data available upon request of a remote user. Mandhyan discloses making data available on

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the Internet see paragraphs 0037 and 0038. Therefore, it would have been obvious to one of ordinary skill in the art the data produced by the Mandhyan system would be accessible to those the data would be most pertinent to because Mandhyan discloses making data from his system available on the internet.

Considering (amended) claims 6,30 Mandhyan does not specifically recite the frequency used in his wireless system. However, one of ordinary skill in the art would readily recognize the use of any frequency would be dictated by a variety reasons (i.e. interference, area of use, protocol, license frequency, non-license frequency).

Therefore, it would have been obvious to one of ordinary skill in the art to use any desired frequency in the Mandhyan system, which would accomplish the task of communication.

Considering (amended) claim 7, Mandhyan discloses the limitation of this claim (see fig 7).

Considering (amended) claim 8, Mandhyan does not specifically recite measuring and recording oxygen contents in a gas line and transmitting the data. Mandhyan disclose an intelligent sensor node comprising sensors, which detects sensors event, and report sensed data to a control node (see paragraph 0009 and fig 7). Therefore, it would have been obvious to one of ordinary skill in the art to measure and record any desired parameter using the Mandhyan system because Mandhyan discloses a sensor system.

Considering claims 9,37,41 the limitation of this claim is interpreted and rejected as recite in claim 4.

Considering claim 12, Mandhyan discloses the limitation of this claim (see paragraphs 0048 and 0065).

Considering claim 13, Mandhyan discloses the limitation of this claim (see paragraphs 0046 and 0065).

Considering claim 14, Mandhyan discloses the limitation of this claim (see paragraph 0048).

Considering claim 15, Mandhyan discloses the limitation of this claim (see paragraphs 0028, 0037 and 0048).

Considering claim 16, Mandhyan discloses the limitation of this claim (see paragraphs 0028 and 0037).

Considering claim 17, Mandhyan discloses the limitation of this claim (see paragraphs 0026 and 0065).

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Considering claim 18, the limitation of this claim is interpreted and rejected as recite in claims 3 and 4.

Considering claim 20, the limitation of this claim is interpreted and rejected as recite in claims 15 and 16.

Considering claim 21, Mandhyan discloses the limitation of this claim (see paragraph 0026).

Considering claim 22, the limitation of this claim is interpreted and rejected as recite in claim 2.

Considering claims 23,25-27 Mandhyan discloses the limitation of this claim (see paragraph 0065).

Considering claim 24, Mandhyan discloses the limitation of this claim (see paragraphs 0028 and 0037).

Considering claim 28, Mandhyan discloses the limitation of this claim (see paragraphs 0009 and 0080).

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Considering claim 32, the limitation of this claim is interpreted and rejected as recite in claim 8.

Considering claims 33,34 the limitations of these claims are interpreted and rejected as recite in claim 10.

Considering claim 35, the limitation of this claim is interpreted and rejected as recite in claim 2.

Considering claim 36, the limitation of this claim is interpreted and rejected as recite in claim 3.

Considering claim 38, the limitation of this claim is interpreted and rejected as recite in claim 6.

Considering claim 39, the limitation of this claim is interpreted and rejected as recite in claim 7.

Considering claim 40, the limitation of this claim is interpreted and rejected as recite in claim 8.



***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 31 is rejected under 35 U.S.C. 102(e) as being anticipated by Mandhyan et al.

Considering claim 31, a) sensing data with geographically spaced sensor (see paragraphs 0021 and 0080); b) transmitting and storing data at a central storage area (see paragraphs 0026); c) assigning a unique address to each sensor and one hopping path between each well and the central store facility (see paragraphs 0023, 0026 and 0070); d) wirelessly transmitting data along a hopping path that includes at least one other sensor unit (see paragraphs 0070 and 0079).

***Conclusion***

Any inquiry concerning this communication should be directed to Examiner Timothy Edwards, Jr. at telephone number (571) 272-3067. The examiner can normally be reached on Monday-Thursday, 8:00 a.m.-6:00 p.m. The examiner cannot be reached on Fridays.

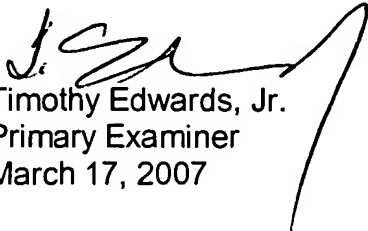
If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber, can be reached at (571) 272-7308.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-4700, Mon-Fri., 8:30 a.m.-5:00 p.m.

Any response to this action should be fax to:

(571) 273-8300 (for formal communications intended for entry).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Timothy Edwards, Jr.  
Primary Examiner  
March 17, 2007